CEDAR CITY DEPARTMENT OF HUMAN RESOURCES DFCM #05126310

(Fee A.E: Attach and fil	l in a	pplicable	data for	each	draw	ng subn	nittal)		
Applicable Codes: International Building Code Planning & Design Criteria to Prevent Architectural Barriers for the Aged and the Physically Handicapped.		ear 003	Internation Internation Ashrae/I National	onal f ES Er	Plumbi nergy	ng Code Code	le	Year 2003 2003 2001 2002	
A. Occupancy and Group : B / S-1							_		
Change in Use : Yes No _️		Mixed	Occupan	cy:	Yes_	✓ No		_	
B. Type of Construction (Circle) $\frac{1}{F.R.}$	II F.R.	<u>II</u> 1 HR.	$\left(\begin{array}{c} \\ \\ \\ \\ \end{array}\right)$	1	II HR.	<u> </u> N	IV H.T.	1	HR. V
C. Location on Property : F.R. Ext. Walls (Hrs.):	N.R.	Ext.	Wall		ng(s) Pro		(Hrs.)	N.R.
D. Occupancy separation required (Hrs.): Sprinklered: Indicate Yes or No		B/R-2=	=2 HR			•			
Stories : 1 or multiple									
 a. Actual Area²(ft) b. Basic allowable area : c. Allowable Area Increase due to side yards: N 			SF ea (f ²) A.		%	Area (ft		%	Area (ft
d. Side yard area incredse (ft): Accumulative sub—total (b=d): Sprinkler: area increase (x3 single) (x 2 multi)		N.	Α						
 e. Total Allowable Area for a single story: x 2 for multi-story building: f. Ratio = a/e 		N.	Α				_		
(Actual divided by allowable)	4					\			
E. Fire—Resistive Requirements	(Hrs.): (1 Hı	r., 2Hr., 3	oHr.,	4Hr.,	N. H.T.)			
Exterior Bearing Walls: Interior Bearing Walls: Exterior Non—bearing Walls: Structural Frame:	N N		Roofs	– Co or Do	eiling ors a	nd Windo			N N NR 1 HR



State of Utah—Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building / Salt Lake City, Utah 84114 / 538-3018

DRAWING INDEX:

M000- TITLE SHEET

M001- MECHANICAL GENERAL NOTES AND LEGEND

MD101- MECHANICAL DEMOLITION ROOF AND LOWER LEVEL PLAN

MD401- LARGE SCALE DEMOLITION FLOOR PLAN

ME101- NEW MECHANICAL ROOF AND LOWER LEVEL PLAN

ME401- LARGE SCALE NEW FLOOR PLANS ME402- LARGE SCALE NEW FLOOR PLAN

ME501- MECHANICAL DETAILS

ME601- SCHEDULES



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SYMBOL	ABR.	DESCRIPTION	SYMBOL	ABR.	DESCRIPTION
AIR SIDE	ADIX.	DEGORII HON	AIR SIDE (
누러 돈글		EXISTING AIR DUCT TO BE REMOVED	8		WALL MOUNTED TEMP. SENSOR
\ \ \		EXISTING AIR DUCT TO REMAIN	SA		SUPPLY AIR
		NEW AIR DUCT	RA		RETURN AIR
		RECT. TO RECT. AIR DUCT TAKE-OFF	EA		EXHAUST AIR
<u></u>		RECT. TO RND. AIR DUCT TAKE-OFF	OA		OUTSIDE AIR
		RND. TO RND. AIR DUCT TAKE-OFF	MA		MIXED AIR
<u> </u>		RECT. TAKE-OFF AT END OF MAIN	FA		FRESH AIR
		FLEXIBLE AIR DUCT	RF		RELIEF AIR
		LINED DUCT			FLEXIBLE DUCT CONNECTION
		VANED ELBOW		AP	ACCESS PANEL
		-	<u> </u>	AF	EXISTING EQUIPMENT TO BE REMOVED
		RADIUS ELBOW			
		CONCENTRIC DUCT TRANSITION			EXISTING EQUIPMENT TO REMAIN
		ECCENTRIC DUCT TRANSITION			NEW EQUIPMENT
¬VD		FLEXIBLE DUCT CONNECTION		CD	CEILING DIFFUSER
		VOLUME DAMPER		FR	FLOOR REGISTER
		SUPPLY AIR DIFFUSER RETURN AIR, FRESH AIR, AND		CRG	CEILING RETURN GRILLE
		TRANSFER AIR CEILING MOUNTED EXHAUST FAN OR		CEG	CEILING EXHAUST GRILLE
		EXHAUST GRILLE		FRG	FLOOR RETURN GRILLE
		RETURN OR OUTSIDE AIR DUCT UP		TC	TIMER CONTROL
		SUPPLY DUCT UP		ECP	ELECTRIC CEILING PANEL
		EXHAUST AIR INTAKE UP	WET SIDE		
		RETURN OR OUTSIDE AIR DUCT DOWN	0		ELBOW UP
		SUPPLY DUCT DOWN	C		ELBOW DOWN
		EXHAUST DUCT DOWN	<u> </u>		TEE UP
		ROUND DUCT UP			TEE DOWN
		ROUND DUCT DOWN			EXISTING PIPING TO BE REMOVED
GENERAL	TERMI	NOLOGY			EXISTING PIPING TO REMAIN
A		SECTION LETTER DESIGNATION			NEW PIPING
ME-501		- SECTION DRAWN ON THIS SHEET			PIPE CAP OR PLUG
A2		DETAIL NUMBER DESIGNATION			FLEXIBLE CONNECTION
		- MECHANICAL EQUIPMENT			
RTU 1		DESIGNATION - EQUIPMENT ITEM DESIGNATION			
D-1 CFM		REGISTER, GRILLE OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW			
		OF IVI LIOTED DELOVY			
•	POC	POINT OF CONNECTION			
<u> </u>	POR	POINT OF REMOVAL			
MC		MECHANICAL CONTRACTOR			
CC		CONTROL CONTRACTOR			
EC		ELECTRICAL CONTRACTOR			
NIC		NOT IN CONTRACT			
NTS		NOT TO SCALE			
С		COMMON			
$\hat{\Lambda}$		REVISION DESIGNATOR AND NUMBER			
<u></u>					

MECHANICAL GENERAL NOTES:

MECHANICAL INFORMATION IS LIMITED TO THE MECHANICAL AND CONTROLS.

> A - EACH DRAWING SHEET AND THE SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN AND NOTED ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN ALL PLACES. ITEMS IN SPECIFICATIONS OR DRAWINGS LISTED WHICH ARE DIFFERING IN EFFICIENCY OR QUALITY SHALL BE HELD TO THE GREATEST OF: EFFICIENCY, QUALITY OR GOVERNING CODE.

B - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEMS ACCORDING TO THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS.

C - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITH PROPER SERVICE ACCESS AND CLEARANCES ACCORDING TO MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW SUPPLIERS BID PACKAGES FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS, SCHEDULES, AND DESIGN INTENT (ALL EQUIPMENT AND METHODS). THE CONTRACTOR SHALL REMOVE AND REINSTALL CORRECTLY AT HIS OWN EXPENSE ANY EQUIPMENT NOT IN COMPLIANCE.

D - THE CONTRACTOR SHALL CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR SIZES, METHODS, ACCESSORIES, AND CLEARANCES IN SPACE AVAILABLE PRIOR TO BIDDING PROJECT.

E - ANYTHING NOT CLEAR OR IN CONFLICT WILL BE EXPLAINED BY MAKING APPLICATION TO THE ENGINEER IN WRITING.

- ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS.
- THE WORKING DRAWINGS ARE DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL DRAWINGS.
- THE INSTRUCTION TO "PROVIDE" ALSO INCLUDES INSTALLATION.
- DUCT SIZES SHOWN ON DRAWINGS ARE FREE AREA DIMENSIONS.
- G-7 C.F.M. LISTED IS ACTUAL AIR.
- SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.
- CONTRACTOR SHALL THOROUGHLY REVIEW AND SIGN SUBMITTALS FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS PRIOR TO ENGINEERS REVIEW. SUPPLIERS SHALL HIGHLIGHT OR MARK ALL INFORMATION REQUIRED TO SHOW COMPLIANCE TO THE SPECIFICATIONS. ALL REQUESTED EXCEPTIONS TO THE SPECIFICATIONS, OR SCHEDULES SHALL BE CLEARLY NOTED AND EXPLAINED. SUBMITTAL REVIEW AND ACCEPTANCE IS FOR DESIGN CONCEPT ONLY, AND DOES NOT AT ANY TIME RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO MEET SPECIFICATIONS, CAPACITIES, OR DESIGN INTENT.
- ALL MECHANICAL SHALL BE INSTALLED AND CONFORM TO THE 2003 EDITION OF THE IMC AND IPC WITH UTAH ANNOTATIONS.
- G-11 THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANT, OIL, ETC. ALL SUCH MATERIAL SHALL BE HANDLED, DISPOSED, AND USED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A LICENSED DESIGN BUILD ELECTRICIAN TO PERFORM ALL ELECTRICAL WORK FOR THIS PROJECT. THE DESIGN BUILD ELECTRICAL WORK SHALL BE STAMPED BY A PROFESSIONAL ELECTRICAL ENGINEER LICENSED IN THE STATE OF UTAH. ALL ELECTRICAL WORK SHALL COMPLY WITH THE CURRENT APPLICABLE CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE NEC, AND THE STATE OF UTAH DFCM DESIGN AND CONSTRUCTION STANDARDS AND GUILDLINES.

State of Utah Department of Administrative Services



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PROJECT NAME & ADDRESS

CEDAR CITY DEPARTMENT OF HUMAN RESOURCES

DFCM# 05126310

CEDAR CITY, UTAH

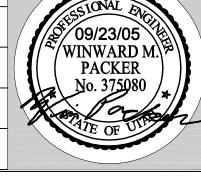
MARK	DATE	REVISION

PROJECT MANAGER: DRAWN BY: **STAFF**

CHECKED BY: SLW

09/23/05 WHW JOB NO.: 05014

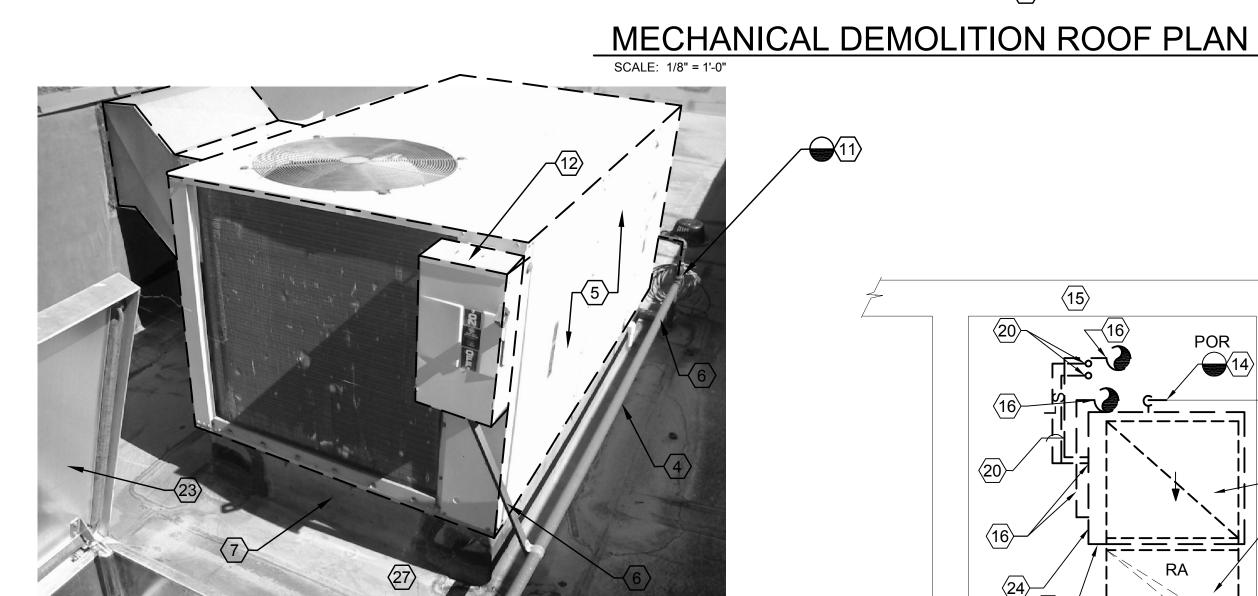
SHEET TITLE



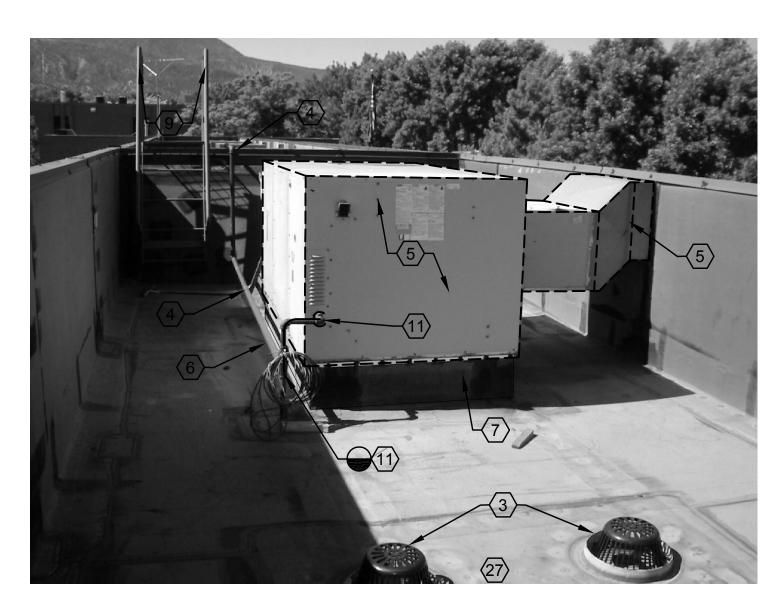
MECHANICAL GENERAL NOTES AND LEGEND

M001

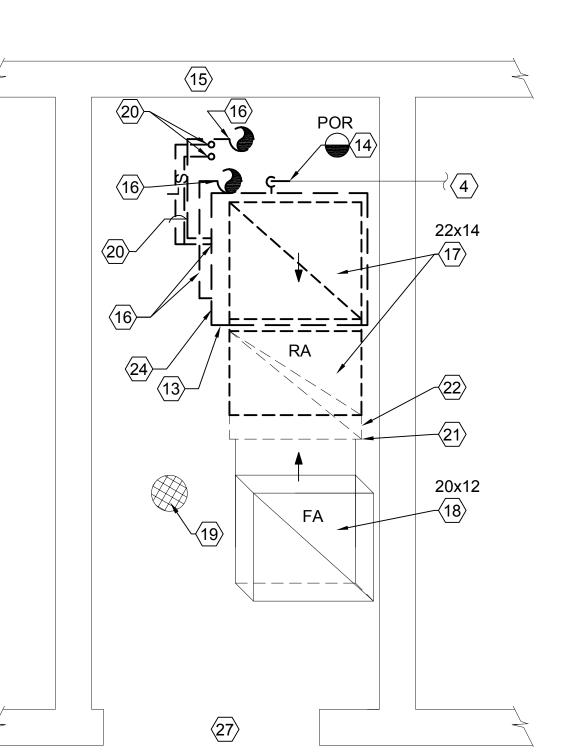
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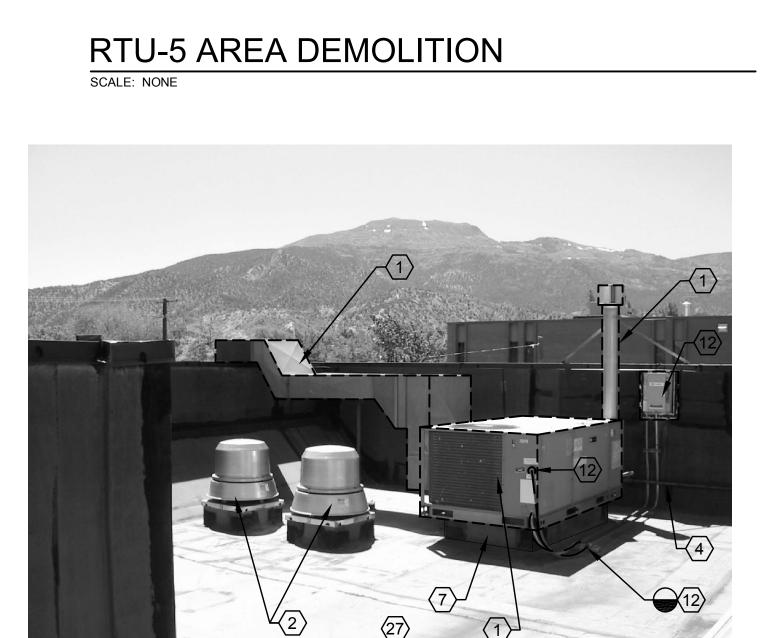
RTU-1A LENNOX ROOFTOP UNIT DEMOLITION SCALE: NONE



RTU-1A AREA DEMOLITION



LOWER FLOOR FURNACE DEMOLITION PLAN



RTU-5 CARRIER ROOFTOP UNIT DEMOLITION SCALE: NONE

SHEET NOTES

- 1 REMOVE EXISTING CARRIER ROOFTOP UNIT ALONG WITH FRESH AIR DUCT, ELECTRIC AND GAS CONNECTIONS, AND ALL ACCESSORIES RELATED TO EXISTING ROOF TOP UNIT.
- 2 EXISTING EXHAUST FAN SHALL REMAIN.
- $\langle 3 \rangle$ EXISTING ROOF DRAINS SHALL REMAIN.
- $\langle 4 \rangle$ EXISTING GAS PIPING SHALL REMAIN.
- 5 REMOVE EXISTING LENNOX ROOF TOP UNIT ALONG WITH FRESH AIR DUCT, ELECTRIC AND GAS CONNECTIONS AND ALL ACCESSORIES RELATED TO EXISTING ROOFTOP UNIT.
- $\langle 6 \rangle$ GAS PIPING CONNECTED TO ROOFTOP UNIT SHALL BE SUPPORTED FROM ROOF WHEN EXISTING ROOFTOP UNIT IS REMOVED.
- $\overline{\langle 7 \rangle}$ EXISTING ROOFTOP CURBS SHALL REMAIN. IF ROOF IS DAMAGED, CONTRACTOR SHALL WORK WITH DFCM TO FIND ORIGINAL ROOFING CONTRACTOR FOR THIS BUILDING SO HE CAN MAKE ALL ROOF REPAIRS AND MAINTAIN ROOFING WARRANTEE.
- (8) EXISTING SKY LIGHT SHALL REMAIN.
- $\langle 9 \rangle$ EXISTING LADDER ACCESS BETWEEN THE TWO ROOFS.
- (10) EXISTING LENNOX ROOFTOP UNITS SHALL
- (11) REMOVE THIS SECTION OF GAS PIPING CONNECTION TO UNITS.
- (12) REMOVE ELECTRIC FLEX CONNECTIONS BACK TO CONNECTION CONDUIT. CONDUIT SHALL REMAIN AND BE RE-USED FOR NEW UNIT. REMOVE **EXISTING DIS-CONNECTS.**
- $\langle 13 \rangle$ REMOVE EXISTING PULSE FURNACE AND ALL ASSOCIATED ITEMS.
- $\langle 14 \rangle$ REMOVE GAS PIPING CONNECTION TO FURNACE BACK TO POINT SHOWN.
- (15) REMOVE ELECTRIC CONNECTION TO FURNACE AND SAVE FOR CONNECTION TO NEW FURNACE.
- (16) REMOVE EXHAUST AND COMBUSTION AIR PVC PIPE FROM FURNACE TO EXISTING TERMINATION FITTINGS.
- (17) REMOVE EXISTING RA DUCT FROM FURNACE. CONNECTION TO FLEXIBLE CONNECTION. RETURN DUCT FROM FLEXIBLE CONNECTION TO FLOOR SHALL REMAIN. PROVIDE NEW FLEXIBLE CONNECTOR WHEN NEW FURNACE IS INSTALLED.
- (18) EXISTING FRESH AIR DUCT SHALL REMAIN. REMOVE DAMPER CONTROLS.
- (19) EXISTING FLOOR DRAIN SHALL REMAIN.
- (20) REMOVE EXISTING REFRIGERANT PIPING.
- (21) FA CONNECTION TO RA DUCT SHALL REMAIN.
- (22) RA RISER FROM FLOOR 22X18 SHALL REMAIN.
- (23) EXISTING ROOF HATCH ACCESS TO REMAIN.
- $\langle 24 \rangle$ SA IS UNDER FLOOR.
- (25) REMOVE EXISTING AIR COOLED CONDENSING UNIT AND CONCRETE PAD.
- (26) DISCONNECT EXISTING ELECTRICAL AND REFRIGERANT PIPING AT UNIT. REMOVE EXISTING REFRIGERANT PIPING. SAVE ELECTRICAL FOR CONNECTION TO NEW CONDENSING UNIT.
- (27) IF CONTRACTOR HAS ANY QUESTION AS TO WHAT STAYS OR WHAT IS TO BE REMOVED, PLEASE ASK ENGINEER. ANY ITEM REMOVED THAT SHOULD HAVE REMAINED SHALL BE REPLACED. IF ITEM IS DAMAGED IT SHALL BE REPLACED WITH A NEW ITEM ALL AT THE EXPENSE OF THE CONTRACTOR.

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PROJECT NAME & ADDRESS

CEDAR CITY DEPARTMENT OF HUMAN RESOURCES

DFCM# 05126310

CEDAR CITY, UTAH

MARK	DATE	REVISION

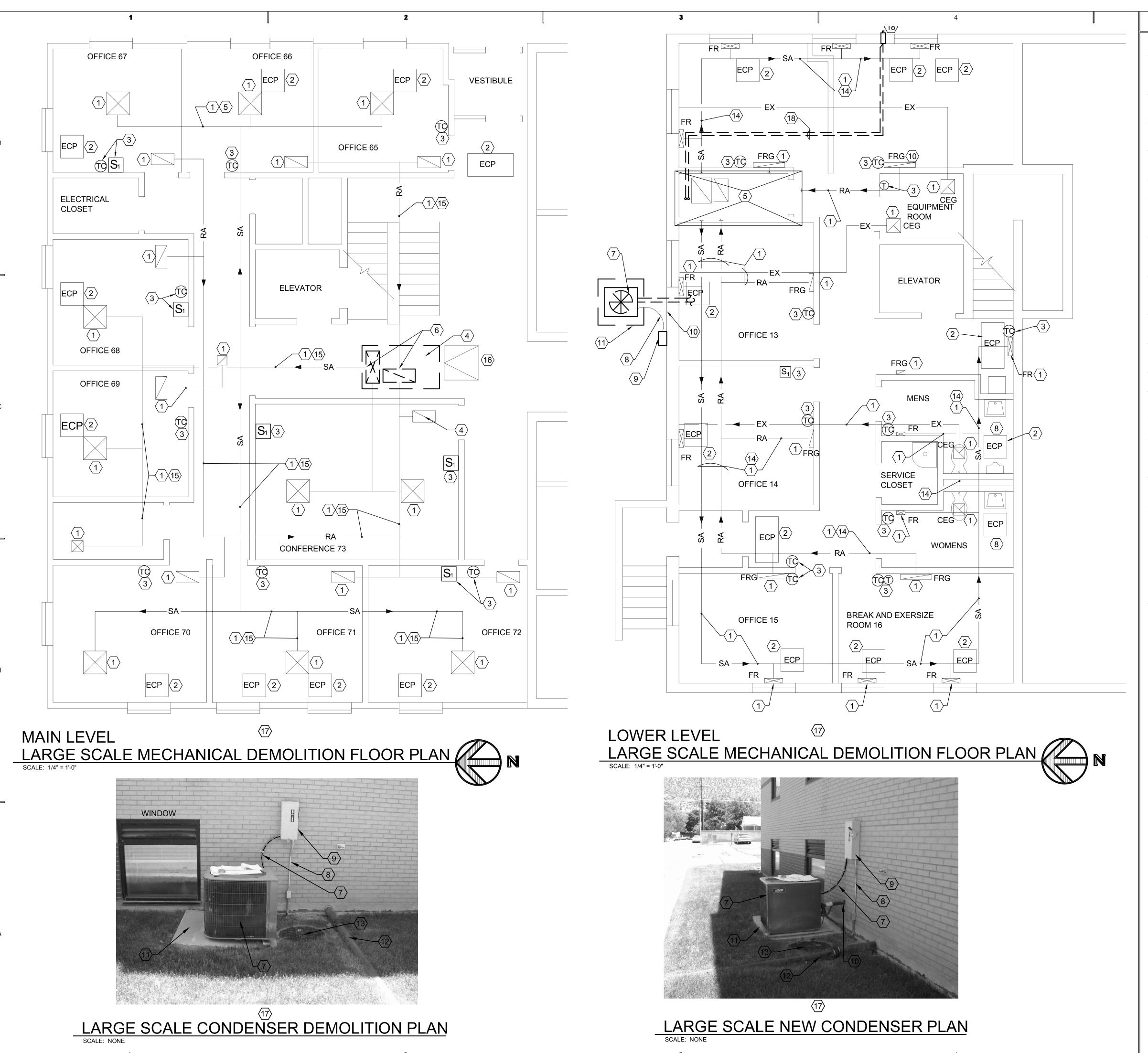
PROJECT MANAGER: WP DRAWN BY: STAFF CHECKED BY: SLW

09/23/05 WHW JOB NO.:

05014

MECHANICAL DEMOLITION ROOF AND LOWER LEVEL PLAN

MD101



SHEET NOTES

1 ALL DUCTWORK, DIFFUSERS, GRILLES ETC. SHALL REMAIN. SEE SHEET ME401 FOR NEW BALANCE.

REMAIN.

- $\langle 2 \rangle$ EXISTING ELECTRIC CEILING PANEL SHALL
- $\overline{\langle 3 \rangle}$ EXISTING THERMOSTATS, SENSORS AND TIMER CONTROL SHALL REMAIN.
- 4 REMOVE EXISTING ROOF MOUNTED ROOFTOP UNIT. SEE SHEET MD101.
- (5) SEE DEMOLITION THIS AREA ON SHEET MD101.
- $\langle 6 \rangle$ DUCT RISER TO REMAIN TO FLEX CONNECTORS WHERE IT WILL BE REMOVED ALONG WITH THE FLEX CONNECTION TO THE UNIT CONNECTION.
- $\overline{\langle 7 \rangle}$ REMOVE EXISTING AIR COOLED CONDENSING UNIT, REFRIGERANT PIPING AND ELECTRICAL CONNECTION.
- $\langle 8 \rangle$ EXISTING ELECTRICAL CONDUIT, WIRING ETC. SHALL REMAIN FOR RECONNECTION TO NEW CONDENSING UNIT.
- (9) REMOVE EXISTING BREAKER, SEE SHEET ME401 FOR REPLACEMENT.
- $\langle 10 \rangle$ EXISTING WALL OPENING SHALL REMAIN FOR NEW PIPING.
- (11) REMOVE EXISTING CONCRETE PAD.
- (12) EXISTING 4"Ø EXPOSED ROOF DRAIN LINE SHALL REMAIN.
- (13) EXISTING MANHOLE SHALL REMAIN.
- (14) ALL DUCTWORK IS UNDER FLOOR IN LOWER LEVEL EXCEPT FOR EXHAUST FANS IN RESTROOMS.
- (15) ALL DUCTWORK SERVING MAIN LEVEL IS OVERHEAD IN CEILING SPACE.
- (16) CEILING ACCESS TO ROOF HATCH SHALL REMAIN.
- (17) IF CONTRACTOR HAS ANY QUESTION AS TO WHAT STAYS OR WHAT IS TO BE REMOVED PLEASE ASK ENGINEER. ANY ITEM REMOVED THAT SHOULD HAVE REMAINED SHALL BE REPLACED. IF ITEM IS DAMAGED IT SHALL BE EXPENSE OF THE CONTRACTOR.
- (18) REMOVE EXISTING PVC VENT AND COMBUSTION AIR PIPING IN CEILING AND CONCENTRIC FITTING AT WALL. FIELD VERIFY LOCATION IN CEILING.

State of Utah Department of Administrative Services



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DFCM# 05126310

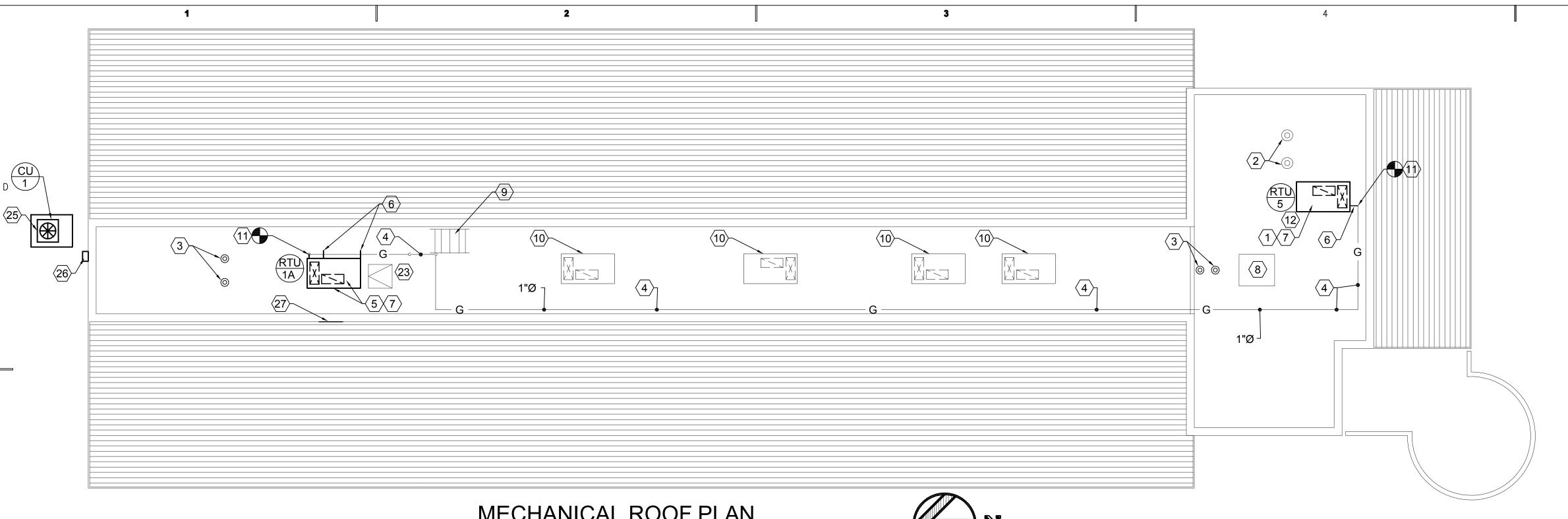
CEDAR CITY, UTAH

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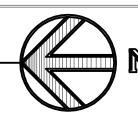
09/23/05 WHW JOB NO.: 05014

LARGE SCALE DEMOLITION FLOOR PLAN

MD401

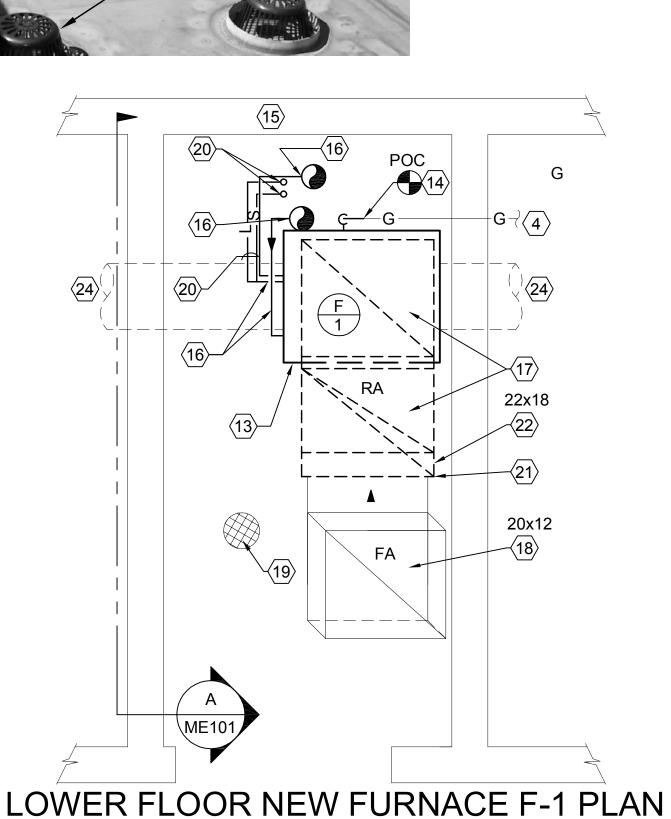


MECHANICAL ROOF PLAN



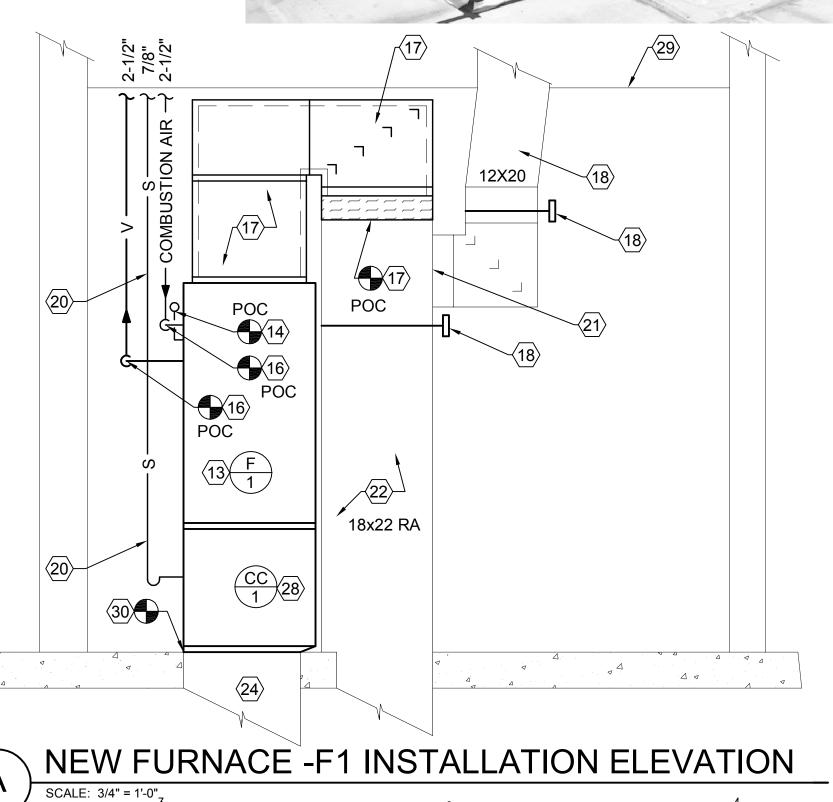
NEW RTU-5 AREA INSTALLATION SCALE: NONE

NEW RTU-1A AREA INSTALLATION



7

SCALE: 3/4" = 1'-0"



SHEET NOTES

- 1 PROVIDE NEW ROOFTOP UNIT RTU-5 IN SAME LOCATION AS EXISTING REMOVED UNIT.
- $\langle 2 \rangle$ EXISTING EXHAUST FAN SHALL REMAIN.
- (3) EXISTING ROOF DRAINS SHALL REMAIN.

 $\overline{\langle 4 \rangle}$ EXISTING GAS PIPING SHALL REMAIN.

- (5) PROVIDE NEW ROOFTOP UNIT RTU-1A IN SAME LOCATION AS EXISTING REMOVED UNIT.
- $\langle 6 \rangle$ GAS PIPING TO ROOFTOP UNITS SHALL BE SUPPORTED FROM ROOF. SEE DETAIL D2/ME501.
- $\overline{\langle 7 \rangle}$ EXISTING ROOFTOP CURBS SHALL REMAIN. PROVIDE ADAPTER CURBS FOR THE NEW ROOFTOP UNITS. IF ROOF IS DAMAGED, CONTRACTOR SHALL WORK WITH DFCM TO FIND ORIGINAL ROOFING CONTRACTOR FOR THIS BUILDING SO HE CAN MAKE ALL ROOF REPAIRS AND MAINTAIN ROOFING WARRANTEE.
- (8) EXISTING SKY LIGHT SHALL REMAIN.
- $\left\langle 9\right\rangle$ EXISTING LADDER ACCESS BETWEEN THE TWO ROOFS.
- (10) EXISTING LENNOX ROOFTOP UNITS SHALL REMAIN.
- (11) PROVIDE NEW GAS PIPING AS SHOWN AND CONNECT TO NEW ROOFTOP UNITS. SEE DETAIL C4/ME501.
- (12) CONNECT NEW ELECTRICAL FLEX AND WIRING TO NEW ROOFTOP UNITS. CONNECT TO EXISTING CONDUIT AND WIRING. PROVIDE NEW DISCONNECTS.
- (13) PROVIDE NEW 90 PLUS FURNACE IN SAME LOCATION AS EXISTING REMOVED FURNACE.
- (14) EXTEND EXISTING GAS PIPING AND CONNECT TO NEW FURNACE. SEE DETAIL C4/ME501.
- (15) EXTEND EXISTING ELECTRIC SERVICE AND CONNECT TO NEW FURNACE.
- (16) PROVIDE NEW 2-1/2" VENT AND COMBUSTION AIR PVC PIPING AS SHOWN.
- (17) PROVIDE NEW RA DUCT FROM TOP OF NEW FURNACE TO EXISTING RA RISER. PROVIDE NEW FLEXIBLE CONNECTION. SEE FURNACE ROOM **ELEVATION A/ME101.**
- (18) EXISTING FRESH AIR DUCT SHALL REMAIN. REPLACE EXISTING DAMPER CONTROLS WITH NEW ELECTRONIC OPERATORS.
- (19) EXISTING FLOOR DRAIN SHALL REMAIN.
- 20 NEW REFRIGERANT PIPING. SEE ISOMETRIC
- (21) EXISTING FA CONNECTION TO EXISTING RA DUCT. SHALL REMAIN.
- (22) RA RISER FROM FLOOR 22X18 SHALL REMAIN.
- (23) EXISTING ROOF HATCH ACCESS.
- (24) EXISTING UNDER FLOOR SA.
- PROVIDE NEW AIR COOLED CONDENSING UNIT CU-1. SEE ISOMETRIC A4/ME101.
- (26) EXTEND EXISTING ELECTRIC SERVICE AND CONNECT TO NEW CONDENSING UNIT.
- 27 PROVIDE SHEET METAL COVER OVER EXISTING WALL OPENING. MATCH EXISTING. LOUVER ON OTHER SIDE SHALL REMAIN.
- 28 PROVIDE NEW DX COOLING COIL FOR DOWNFLOW FURNACE. SEE SCHEDULE SHEET ME601. SEE DETAIL B3/ME501 FOR CONNECTION.
- 29 EXISTING 7'-10" HIGH CEILING.
- (30) CONNECT TO EXIST RA PLENUM OR DUCT. FIELD VERIFY.

State of Utah Department of Administrative Services



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DFCM# 05126310

CEDAR CITY, UTAH

MARK	DATE		RE	VISION		
PROJECT	MANAGI WP	ER:		ON THE		
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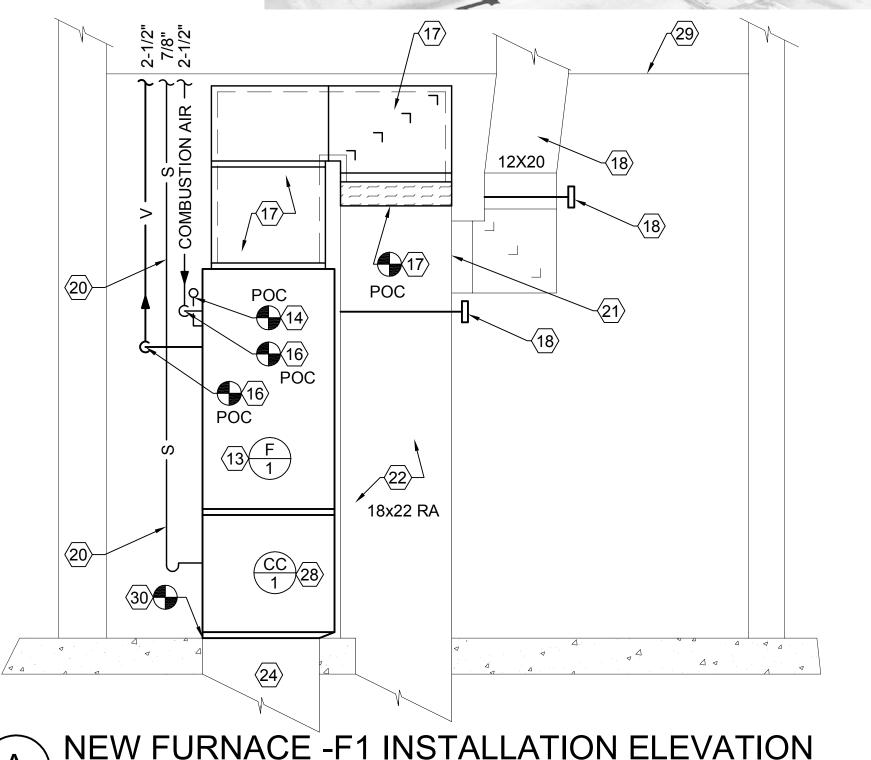
09/23/05 WHW JOB NO.: 05014

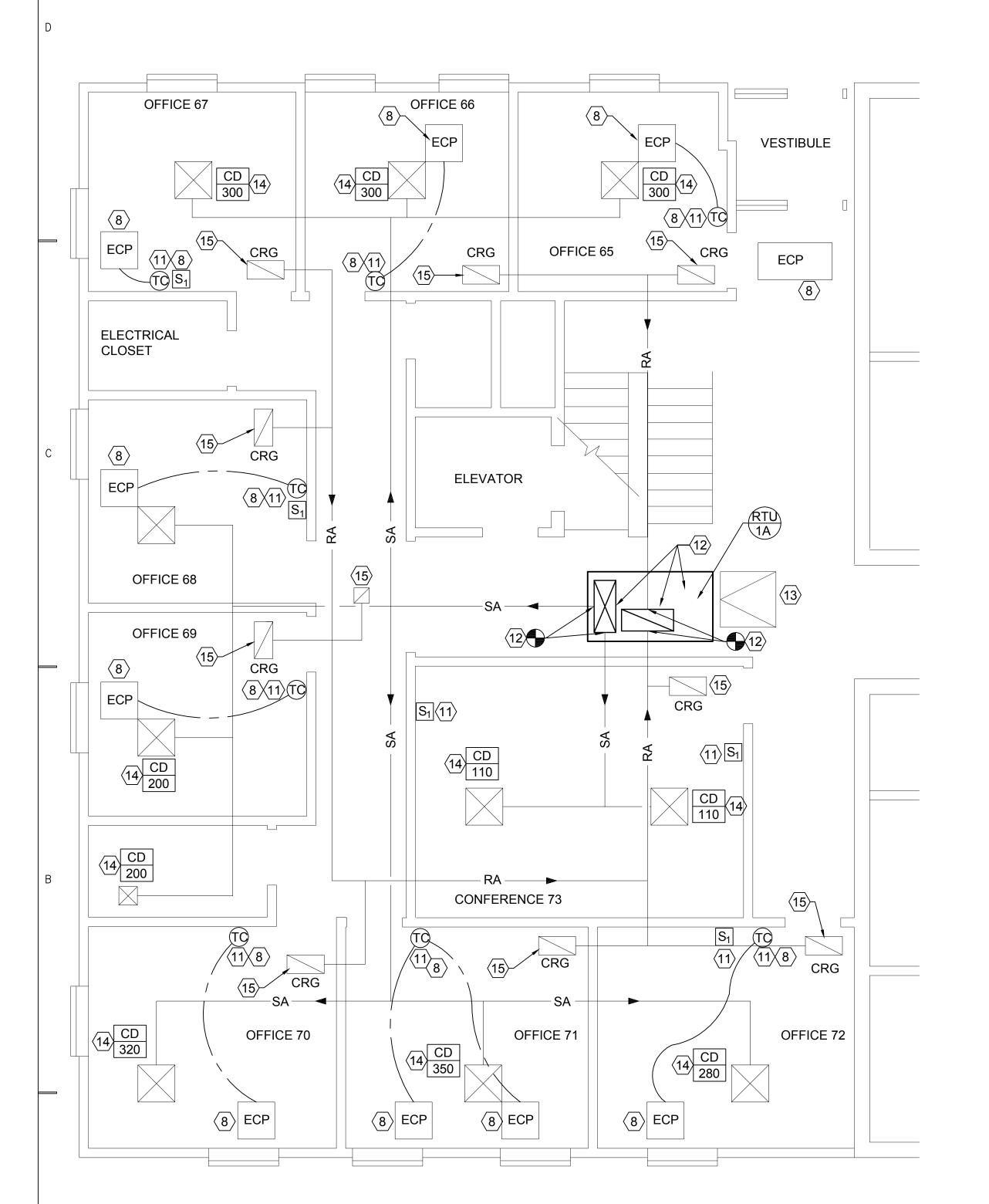
SHEET TITLE

PACKER

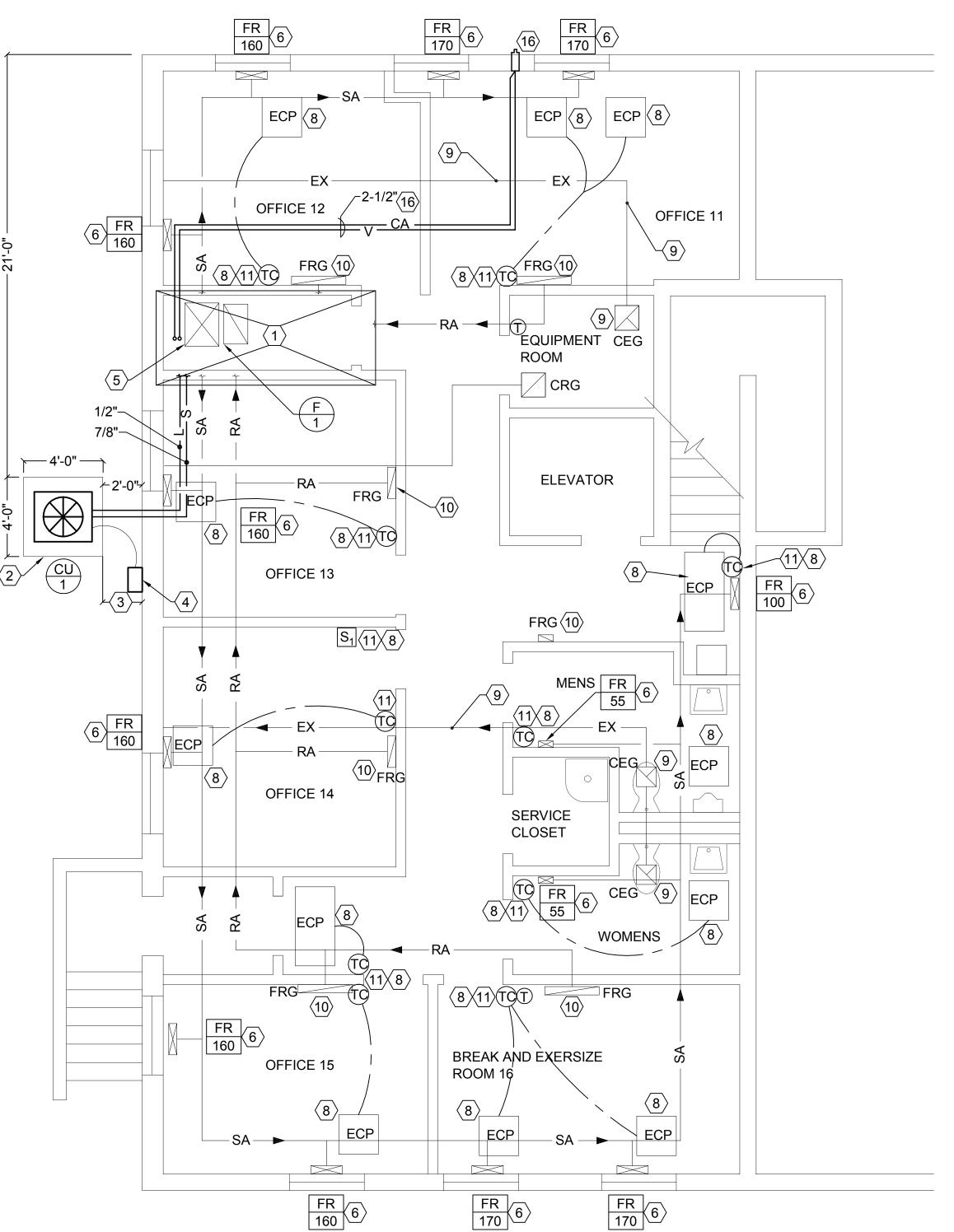
NEW MECHANICAL ROOF AND LOWER LEVEL PLAN

ME101





MAIN LEVEL LARGE SCALE NEW MECHANICAL FLOOR PLAN NORTH END



LOWER LEVEL LARGE SCALE NEW MECHANICAL FLOOR PLAN NORTH END



SHEET NOTES

- 1 PROVIDE NEW FURNACE IN PLACE OF EXISTING REMOVED FURNACE. SEE PARTIAL PLAN ME101 FOR DETAILS.
- $\langle 2 \rangle$ PROVIDE NEW 6" HIGH CONCRETE PAD. CONCRETE PAD SHALL EXTEND BEYOND EQUIPMENT SUPPLIED ON ALL SIDES.
- (3) CONDENSING UNIT SHALL BE LOCATED AT LEAST 30" FROM BUILDING OR AS REQUIRED BY CONDENSING UNIT MANUFACTURER.
- 4 RE-CONNECT EXISTING ELECTRICAL TO NEW CONDENSING UNIT.
- (5) CONTRACTOR, AFTER CONNECTION TO NEW COOLING COIL, SHALL EVACUATE AND CHARGE REFRIGERANT PIPING AS REQUIRED BY THE SPECIFICATIONS.
- 6 BALANCE EXISTING FLOOR REGISTERS TO CFM SHOWN ON THE DRAWING. FLOOR REGISTERS ARE ALL EXISTING. FIELD VERIFY LOCATIONS.
- (7) CONTRACTOR SHALL PROVIDE NEW PVC PIPING AND MANIFOLD FITTING USING THE EXISTING PIPING ROUTING AND WALL OPENING.
- (8) EXISTING ELECTRIC CEILING PANELS AND WALL CONTROLS SHALL REMAIN.
- (9) EXISTING EXHAUST FANS AND DUCTWORK SHALL REMAIN.
- (10) RETURN AIR FLOOR GRILLES SHALL REMAIN.
- (11) RE-USE EXISTING CONTROLS-CONNECT TO EXISTING SYSTEM.
- (12) NEW ROOFTOP UNIT RTU-1A. SEE ROOF PLAN ME101. LINE UP EXISTING SUPPLY AND RETURN DUCT DROPS WITH INLETS AND OUTLETS OF NEW SUPPLIED UNIT. PROVIDE NEW FLEXIBLE CONNECTIONS FOR BOTH SUPPLY AND RETURN.
- (13) EXISTING CEILING ACCESS PANEL TO ROOF. HATCH IS ON ROOF.
- (14) BALANCE EXISTING CEILING DIFFUSERS TO CFM SHOWN ON THE DRAWINGS. DIFFUSERS ARE ALL EXISTING. FIELD VERIFY LOCATIONS. PROVIDE VOLUME DAMPERS FOR EACH CEILING DIFFUSER IF NOT ALREADY INSTALLED.
- (15) RETURN AIR CEILING GRILLES SHALL REMAIN.
- (16) PROVIDE NEW PVC VENT AND COMBUSTION AIR PIPING IN CEILING AND CONCENTRIC FITTING AT WALL. ROUTE AS SAME AS EXISTING.

State of Utah Department of Administrative Services



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PROJECT NAME & ADDRESS

CEDAR CITY DEPARTMENT OF HUMAN RESOURCES

DFCM# 05126310

CEDAR CITY, UTAH

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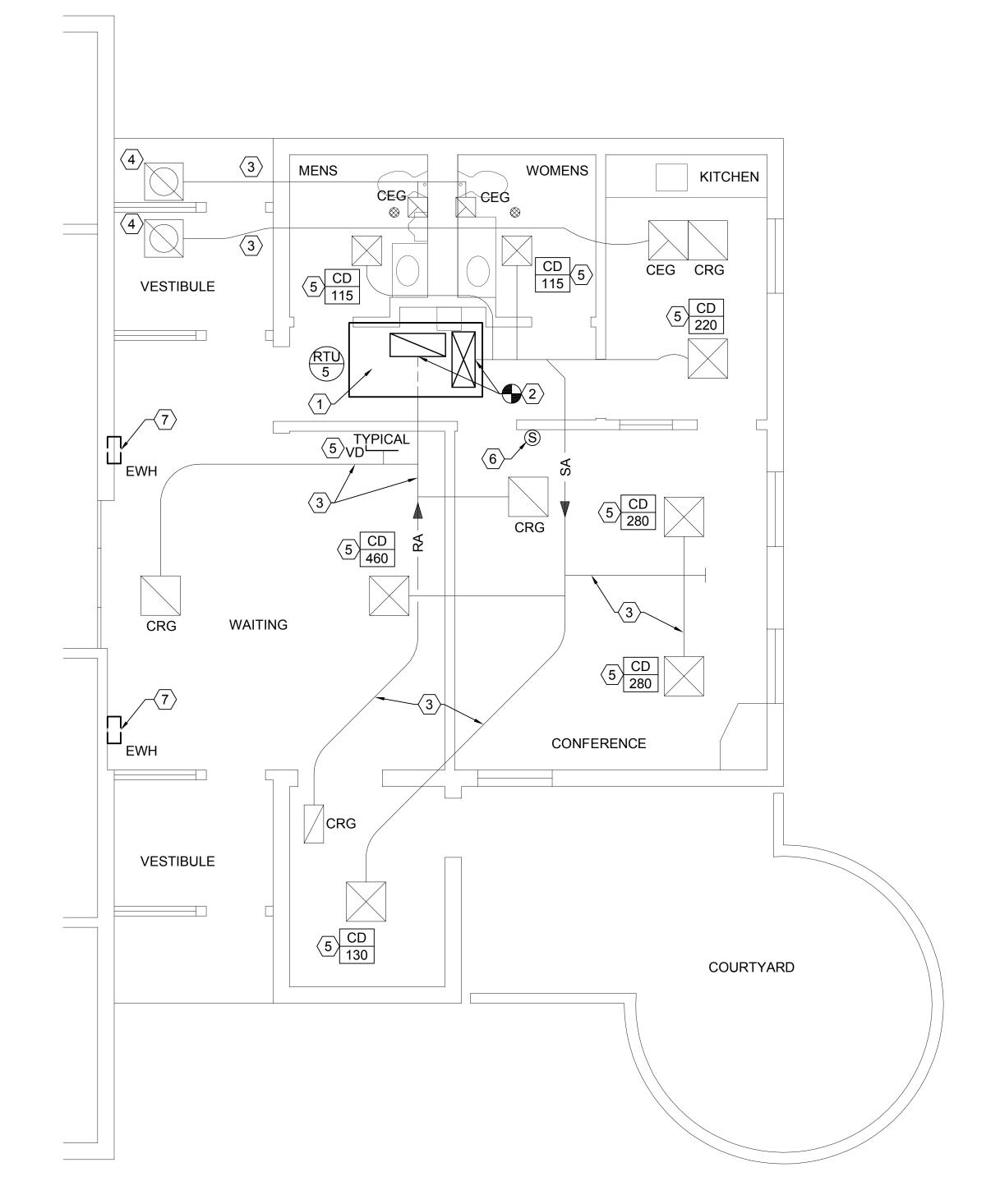
09/23/05 WHW JOB NO.:

05014

LARGE SCALE **NEW FLOOR PLANS**

ME401

09/23/05 WINWARD M. PACKER

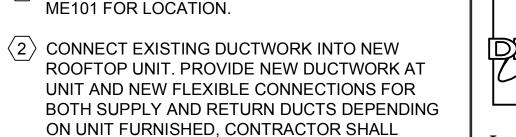


NEW MECHANICAL FLOOR PLAN SOUTH END SCALE: 1/4" = 1'-0"



SHEET NOTES

 $\langle 1 \rangle$ NEW ROOFTOP UNIT RTU-5 ROOF. SEE SHEET ME101 FOR LOCATION.



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 $\langle 3 \rangle$ EXISTING DUCTWORK, DIFFUSERS, GRILLES ETC. SHALL REMAIN.

ADJUST EXISTING AND NEW DUCTS TO MATCH

4 EXISTING EXHAUST FANS SHALL REMAIN.

EXISTING CONDITIONS.

- (5) BALANCE EXISTING CEILING DIFFUSERS TO CFM SHOWN ON THE DRAWING. ALL DIFFUSERS ARE EXISTING. PROVIDE VOLUME DAMPERS FOR EACH DIFFUSER IF NOT ALREADY INSTALLED.
- 6 EXISTING SENSOR CONTROL SHALL BE RE-USED FOR NEW ROOFTOP UNIT.
- $\langle 7 \rangle$ REMOVE EXISTING ELECTRIC WALL HEATERS, DISCONNECT AT PANEL. PROVIDE GRILLE WITH BACK PLATE OVER WALL OPENINGS. OPENING IS APPROXIMATELY 1'-4" ± WIDE X 1'-8" HIGH.

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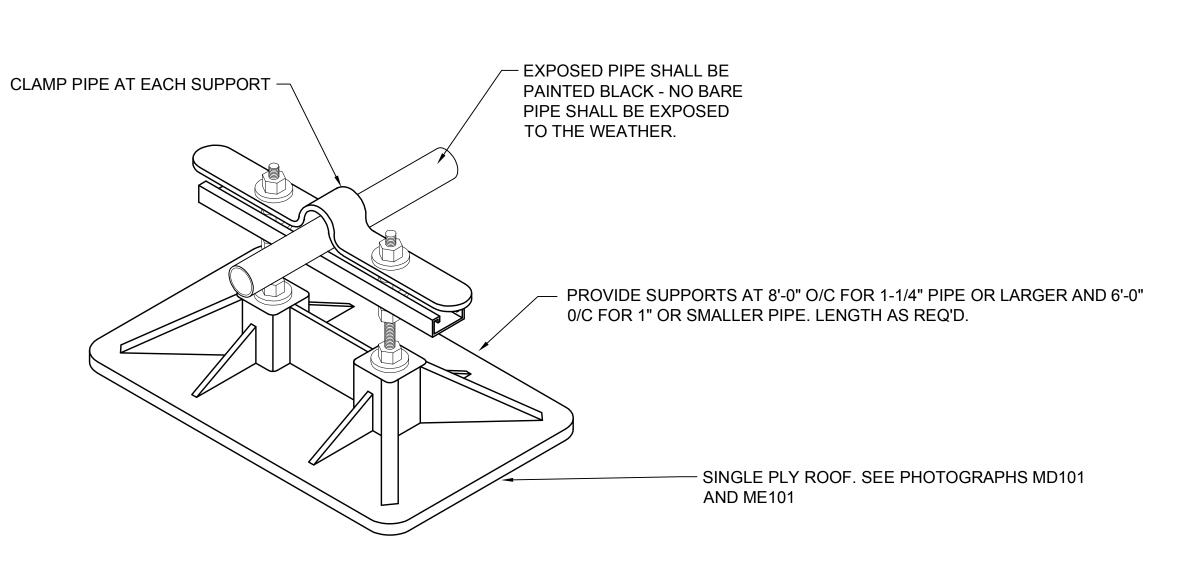
CEDAR CITY, UTAH

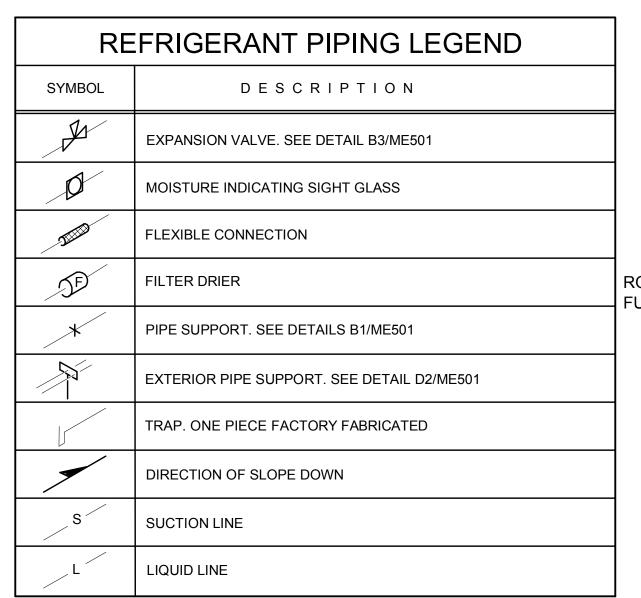
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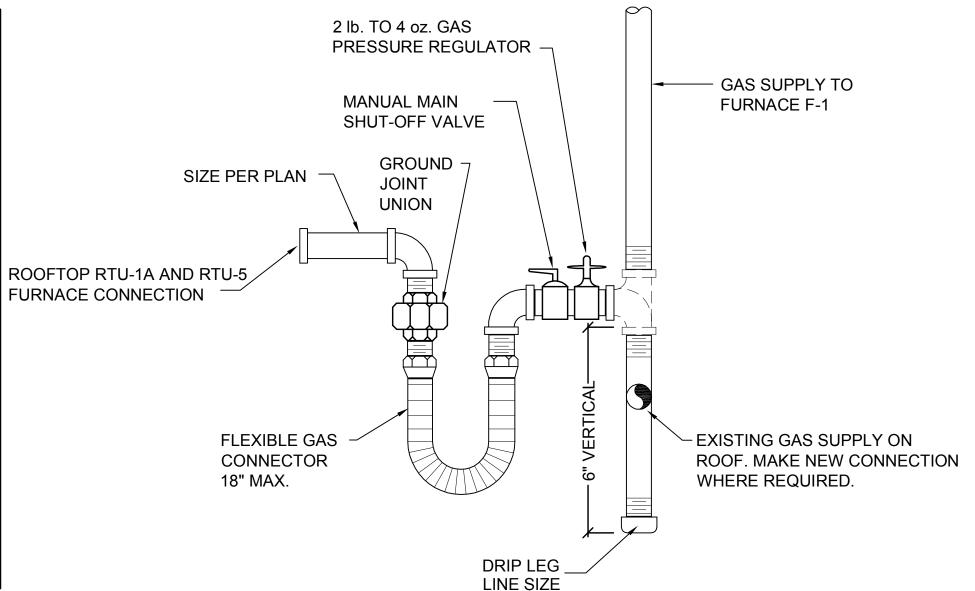
09/23/05 WHW JOB NO.: 05014 SHEET TITLE

NEW LARGE SCALE FLOOR PLAN SOUTH PLAN

ME402



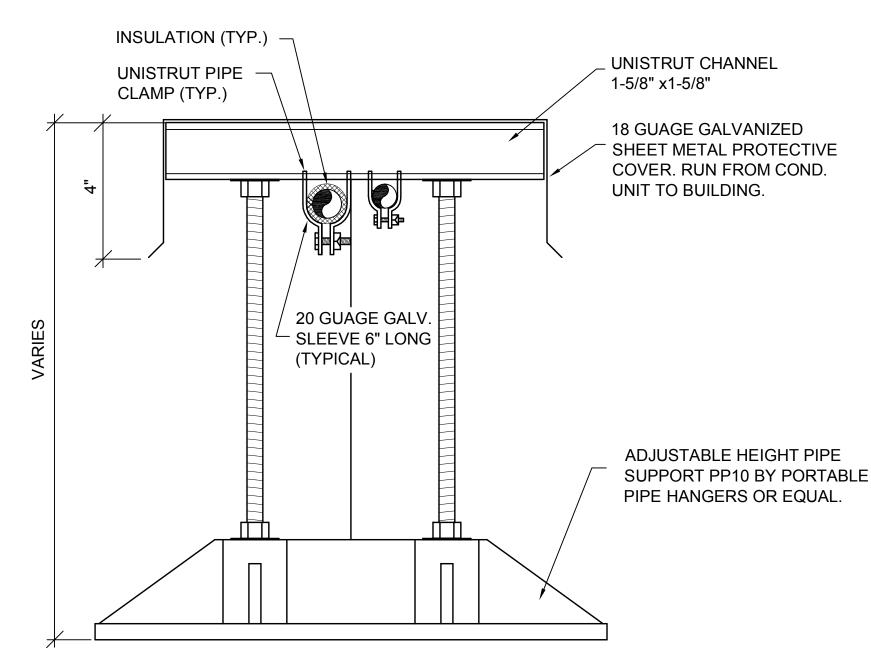


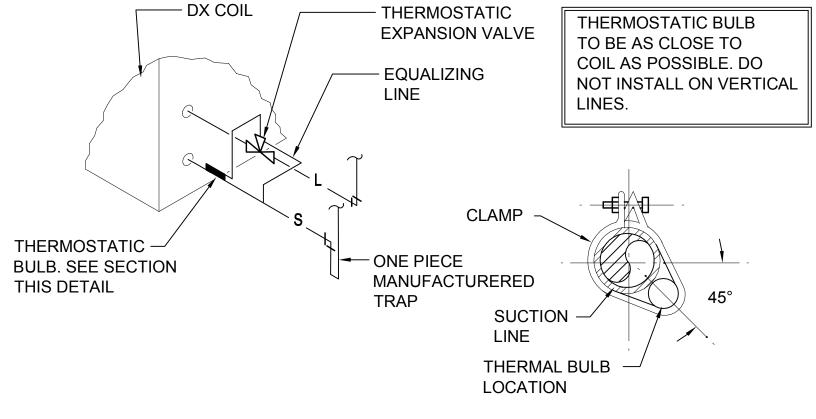


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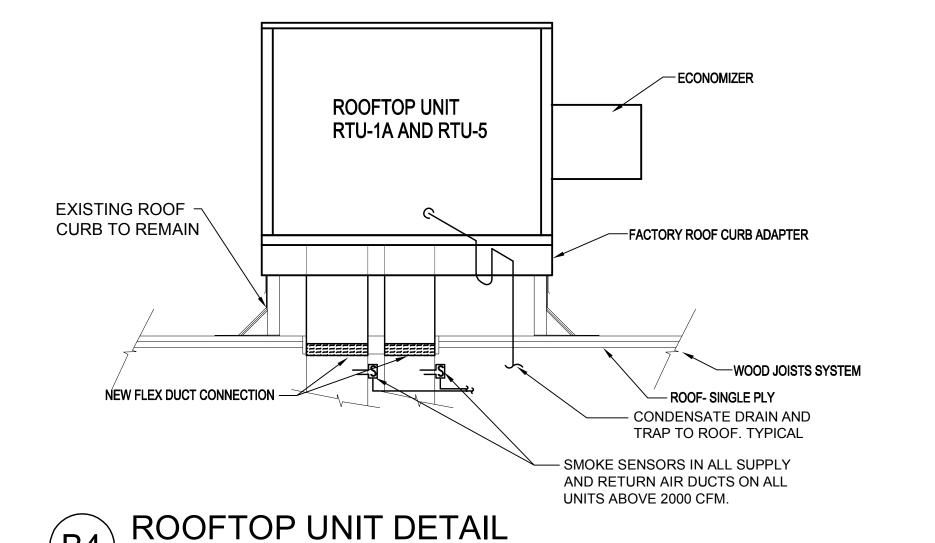
GAS SUPPORT ON ROOF DETAIL



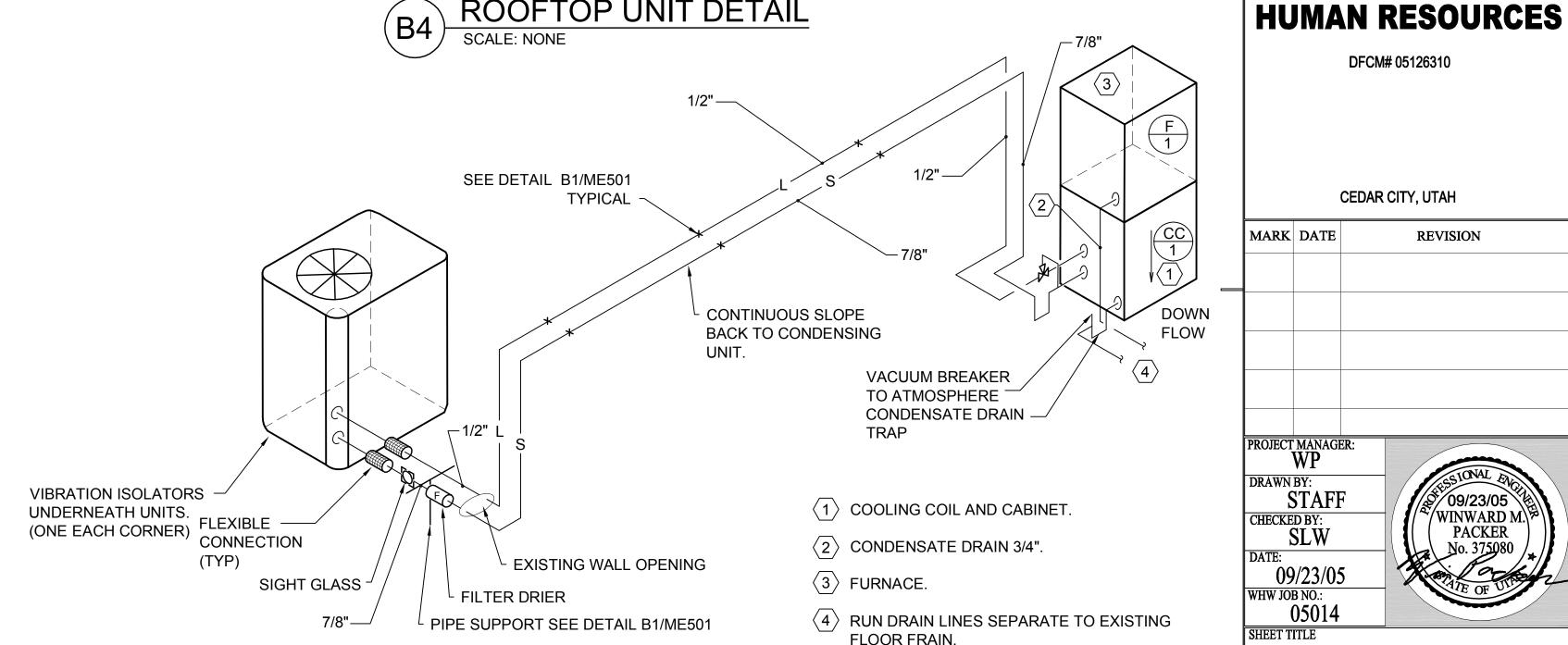




REFRIGERANT COIL **CONNECTION DETAIL**



GAS LINE CONNECTION DETAIL



TYPICAL REFRIGERANT SCHEMATIC SCALE: NONE

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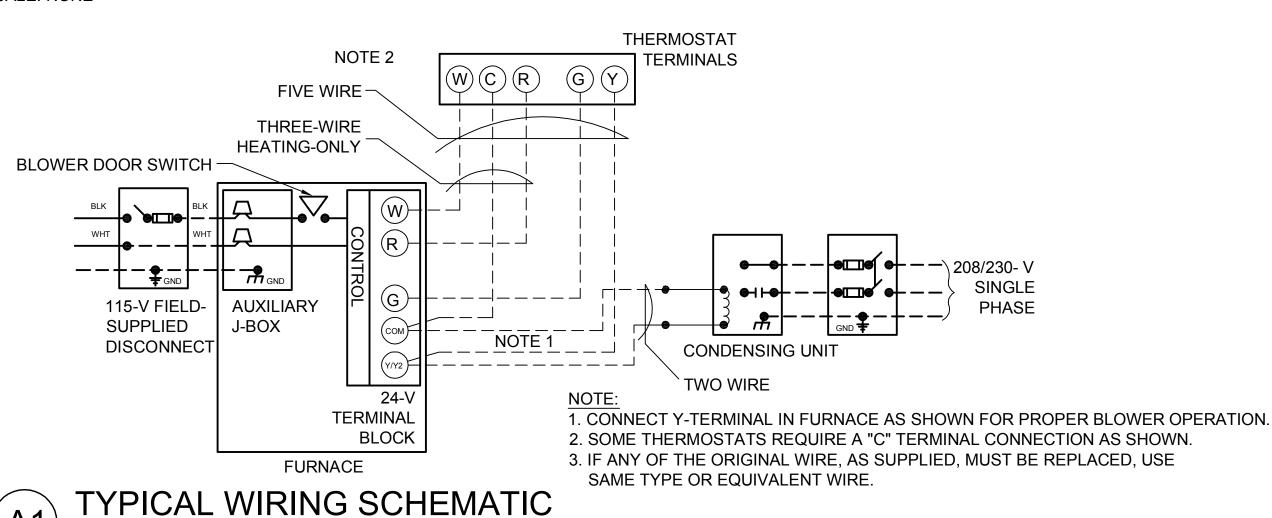
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DETAIL DETAILS

ME501



SCALE: NONE



	AIR COOLED CONDENSING UNIT SCHEDULE											
SYMBOL AREA SERVED	SEDVED MIN SIZE		IPRESSOR MO	SSOR MOTOR MCA			MNUF. & MODEL#	SCHEDULE				
		(TONS)		RLA (EACH)	LRA (EACH)		BKR AMPS		NOTES			
CU 1	LOWER LEVEL FURNACE F-1	4	(1)	20.5	109	27	40	CARRIER 38TXA048-3	1,2,3,4,5,6			

- (1) REFRIGERANT R-22.
- (2) AT DESIGN CONDITIONS AND 95° F EAT.
- (3) CONDENSING UNIT SYMBOL CORRESPONDS WITH FURNACE SYMBOLS.
- 4 SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
- (5) ELECTRIC SERVICE: 208/230/1Ø/60HZ.
- (6) 1/4 HP CONDENSER FAN, 1125 RPM, 1.4 FLA.
- 7 SEER = 13

COOLING COIL SCHEDULE										
SYMBOL	No. REQUIRED		QUIRED ACITY	COND. EN	NT. EVAP.	CFM	MANUF. &	SCHEDULE NOTES		
OTIVIDOL		ТОТ. МВН	SEN. MBH	DB °F	WB °F	Of IVI	MODEL#			
CC 1	(1)	60	60	95	63	1800	CARRIER CK5BXA060024	1,2,3,5,		

- ① COMPLETE WITH FACTORY COIL BOX AND COIL.
- MANUFACTURER NUMBER LISTED ARE CARRIER.
- CAPACITIES SHOWN ARE FOR SINGLE COILS.
- 4 COIL SHALL BE INSTALLED ON DOWN FLOW FURNACE
- 5 TXV- R410A REFRIGERANT

FURNACE SCHEDULE	

						_				
SYMBOL	NO. REQUIRED	MIN BTUH IN-PUT	MIN. BTUH OUTPUT	MINIMUM S.C.F.M.	EXT. STATIC PRESSURE IN W.G.	V-Ø- H	HZ, MIN HP, S	PEED	COMMENTS	SCHEDULE NOTES
F 1	(1)	80,000	75,000	1800	.50	120/1/60	3/4		DOWN FLOW	1,2,3,

- ① SEA LEVEL RATING.
- 2 FURNACE SYMBOL CORRESPONDS WITH CONDENSING UNIT AND COOLING COIL SYMBOLS.
- ③ MANUFACTURER NUMBERS LISTED ARE CARRIER SEE SPECIFICATIONS FOR ADDITIONAL APPROVED MANUFACTURERS.
- 4 2-1/2" PIPE SIZING FOR COMBUSTION AIR AND VENT PIPING.
- ⑤ MAX. UNIT AMPS 14.1, UNIT AMPACITY 18.4. MIN. WIRE SIZE 12, MAX FUSE OR CKT BKR AMPS 20.

ROOFTOP AIR CONDITIONER SCHEDULE (GAS HEAT)

SYMBOL	MANUFACTURER & MODEL NUMBER	SA CFM OSA CFM	E.S.P. IN	HEATING	COOLING			ELECTRICAL						EER/	OPER.		SCHEDULE		
			CFM W.G.	TOT. MIN. INPUT MBH	ENTER AIR (DB) ° F	AMB. AIR (WB) ° F	MIN. TOTAL MBH	V - Ø - Hz	COMPRESSOR #	COMPRESSOR TOTAL RLA	COMPRESSOR TOTAL LRA	INDOOR FAN BLOWER FLA	POWER EXHAUST HP	MCA	МОСР	SEER	WT. (LBS)	COMMENTS	NOTES
RTU 1A	CARRIER 48TME009-A-5HQ	3400	.60	200	95	63	95	208/3/60	TWO (2)	#1 - 17.3 #2 - 14.1	#1 - 120 #2 - 105	5.8		44.3	50	10.10	1099	R-22	1,2,3,4
RTU 5	CARRIER 48TME005-A-5HQ	1600	.50	120	95	63	45	208/3/60	ONE (1)	15.4	90			25.6	30	10	520	R-22	1,2,3,4

- (1) E.S. P. DOES NOT INCLUDE LOSSES THROUGH ACCESSORIES.
- 2 RATED MINIMUM INPUT AT SEA LEVEL.
- 3 PROVIDE ONE 15 AMP, 120 VOLT, DUPLEX GFCI SERVICE OUTLET.
- 4 BELT DRIVE UNIT

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CEDAR CITY, UTAH

MARK	DATE	REVISION								

PROJECT MANAGER: WP **STAFF**

09/23/05 WHW JOB NO.:

MECHANICAL SCHEDULES

ME601